CLAIMS

What is claimed is:

1. A roller switch comprising a roller, a flag arm, and a photoelectric detector, wherein the roller is connected to the flag arm and vertical movement of the roller causes the flag arm to move, and movement of the flag arm causes the photoelectric detector to send a signal, the roller switch being characterized by:

   a pair of flag arms,

   the roller being mounted on a shaft that extends between the pair of flag arms.

2. A roller switch in accordance with claim 1 wherein adjacent to the roller shaft is a tube that extends between both flag arms.

3. A roller switch in accordance with claim 1 wherein the flag arms pivot about a shaft that extends between the two arms and is adjacent to the roller.

4. A roller switch in accordance with claim 1 wherein vertical movement of the roller causes at least one flag arm to unblock the photoelectric detector.

5. A roller switch in accordance with claim 1 wherein the roller switch is capable of pivoting about one end when mounted onto a support structure.

6. A roller switch in accordance with claim 5 wherein the roller and the flag arms are capable of being fixedly raised prior to pivoting of the roller switch.

7. A roller switch in accordance with claim 1 wherein each flag arm is attached to an end plate, a first end plate being further attached to pivoting means and the second end plate being further attached to locking tube into which a locking pin is inserted, the roller switch capable of pivoting about the first end plate when the locking pin is removed from the tube.

8. A method of measuring the length of a finite length strip material, the method including the steps of:

placing the material on a moving conveyor belt,

passing the material under a roller, causing the roller to vertically move,

pivoting a flag arm in response to the movement of the roller,

generating a signal in response to the movement of the flag arm,

measuring the length of the material,

wherein the method is further characterized by the additional step of:

passing the material under a tube prior to passing the material under the roller and

pivoting the flag arm about a shaft that extends through the tube.